



Proposal to Develop a State Energy Plan for Idaho

Presented to: Idaho Legislative Council Interim Committee on Energy,
Environment and Technology

What is Idaho's Energy Future ?



Overview of this presentation:

- Overview of KEMA
- Our team
- Our experience
Energy Issues in the Northwest
- Our approach to this project
- Deliverables
- Budget

KEMA at a Glance

Who we are

- **Parent company: N.V. KEMA**
 - Founded in 1927
 - World headquarters in Arnhem, the Netherlands
- **Integrated group of business units** around the globe
 - US Headquarters in Burlington, MA
 - Active in 18 offices worldwide
 - Serving clients in 50 countries in regions including Europe, North America, Latin America and Asia-Pacific

KEMA at a Glance

Our mission and strategy

- **Our mission:**
 - Addressing the complex multi-dimensional nature of energy and utility challenges.
- **Our strategy:**
 - Delivering ‘whole view’ solutions to our clients
 - Bridging the gap between strategists and implementers, engineers and accountants.

KEMA at a Glance

Our experience and client successes

- **Leading industry authority:** Europe 75+ years, North America 30+ years
- **Demand-side Management:** industry pioneer saving utilities and their customers over \$7 billion
- **ISO and TSO Development, Benchmarking and Control Systems:** 80% North, Central and South American ISOs
- **Market Design:** lead consultant in numerous wholesale competitive markets worldwide
- **Renewable Power Generation:** facilitated 1200 MW of wind power generation worldwide
- **SCADA/EMS System Planning, Procurement and Implementation:** power grid architects for 80% of major North American utilities



Our team

- Liz Hicks – Project Manager –Expertise in planning, public policy, forecasting, energy efficiency and renewables
- Bruce Humphrey – Senior Advisor – Expertise in energy markets, asset management, planning and public policy
- Jim Rossi – Senior Advisor – Expertise in all aspects of generation
- Siri Varadan – Expertise in T&D planning
- Chris Clark- Deputy Project Manager- Expertise in planning, public policy, renewable energy, energy efficiency and market modeling

A Sample of Recent Relevant Experience

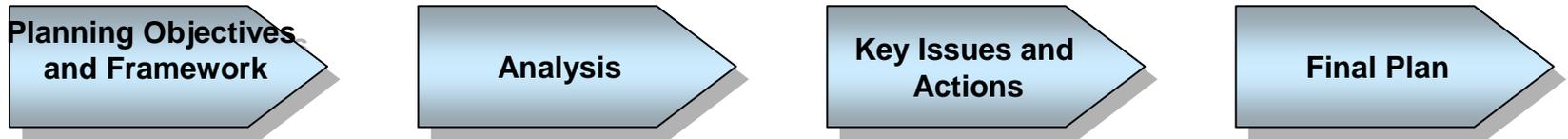
- El Salvador Energy Plan
- Connecticut Energy Plan
- Support of BPA's process improvements
- Transmission Planning Alberta System Operator
- Review of long-range transmission plans of Arizona Utilities
- Transmission analysis for Wind Generation in New Mexico
- Solar Policy Development – CEC
- Energy Efficiency Potential studies – multiple states

Energy Issues in the Northwest

- Need for new electric resources
- Contingencies for short water years
- Rising electric and gas rates
- Impact of intermittent resources in transmission planning
- Future environmental regulation
- Role of independent power producers
- Need for more transmission
- Role of renewable energy

Our approach

Overview of the Planning Process



Key Inputs

- Utility plans
- NWPPC plan
- Census data
- Economic data
- Data from EPA
- Data on planned resources
- Stakeholder interviews

- Consumption data
- Economic drivers
- Key issues
- Proposed expansion plans
- Risks

- Projected needs
- Possible alternatives
- Policy options
- Risks
- Environmental Impacts

- Key strategies
- Draft Action Plan
- Stakeholder input

Key Outcomes

- Key Issues
- Overall Objectives
- Proposed data analysis

- Projected energy needs
- Alternatives
- Benefits and costs

- Key strategies
- Draft Action Plan

- Final Action Plan
- Final Implementation Plan
- Final Energy Plan
- Key Metrics

Key Elements of Our Approach

- Use secondary sources as much as possible
- Work within context of existing plans
- Examine all resource possibilities
- Allow for stakeholder input
- Have a realistic action plan
- Identify key metrics for success

Deliverables

- Kickoff meeting summary
- Memorandum on key issues and objectives
- Prospectus of key issues and actions
- Presentation on key issues and actions
- Draft Action Plan
- Draft Implementation Plan
- Presentation of Draft Implementation Plan
- Draft Energy Plan
- Final Energy Plan

Budget

Cost and Labor Allocation

Task	Description	Hicks	Humphrey	Rossi	Varadan	Clark	Chaytors/D elulius	Support	Total Hours	Total Labor Cost	Direct Cost	Total
		\$ 210	\$ 330	\$ 235	\$ 190	\$ 145	\$ 120	\$ 62				
1	Develop Planning Objectives & Framework											
	kickoff meeting	12		12	12			4	28	\$ 7,868	\$ 3,000	\$ 10,868
	identify information sources	4	4	4	4	24	40		76	\$ 12,140		\$ 12,140
	conduct stakeholder interviews	16	8	16	16	40	80		160	\$ 28,200		\$ 28,200
	prepare summary memo	8		8	8	20			36	\$ 7,980		\$ 7,980
2	Conduct initial analysis	8		60	80	160	160		460	\$ 73,380		\$ 73,380
3	Develop a Prospectus of Key Issues and Actions	16	4	16	40	40	40		140	\$ 26,640		\$ 26,640
4	Develop Draft Action Plan											
	presentation on key issues	12		12	12	40		8	72	\$ 13,916	\$ 3,500	\$ 17,416
	develop action plan	20	4	24	24	40	20					
5	Develop Implementation Plan											
	develop preliminary plan	20	16	12	12	40			80	\$ 20,380		\$ 20,380
	presentation on draft plan	12	12			40	20	8	80	\$ 15,176	\$ 2,000	\$ 17,176
6	Finalize State Energy Plan											
	prepare draft & final plan	16	16	16	16	80	80		208	\$ 36,640		\$ 36,640
	presentation of final plan	12			12			8	20	\$ 5,296	\$ 3,000	\$ 8,296
	PROJECT TOTAL	156	64	180	236	524	440	28	1360	\$ 247,616	\$ 11,500	\$ 259,116



Other Questions?

Thank you for your attention.